

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A haptic function-provided input device that performs a touch operation to slide on an input detection plane, said device comprising:

an input detection unit, which has the input detection plane, that detects a touching position of an operation body and a sliding speed of the operation body;

a computation unit configured to compute a vibration pattern based on the sliding speed detected by the input detection unit; and

a vibration unit that vibrates the input detection plane based on the vibration pattern computed by the computation unit, wherein the computation unit is configured to determine an operation case to compute the vibration pattern, further based on a ratio of the sliding speed of the operation body to a shift in an excitation timing between two actuators of the vibration unit.

2. (Previously Presented) The haptic function-provided input device according to claim 1, wherein the computation unit computes a vibration pattern of the input detection plane to generate vibrations from a low frequency and a small amplitude to a high frequency and a large amplitude, as the operation body goes away from a position where the operation body has touched the input detection plane.

3. (Previously Presented) The haptic function-provided input device according to claim 1, further comprising:

a control unit configured to control input information variably based on the sliding speed.

4. (Previously Presented) The haptic function-provided input device according to claim 1, further comprising:

a control unit configured to control input information variably based on distance information on a distance from a point where the operation body touches the input detection plane to a point where a sliding of the operation body then stops.

5. (Currently Amended) An information input method for inputting information by performing a touch operation to slide on an input detection plane, said method comprising:

detecting a touched position and a sliding speed of an operation body that touches the input detection plane;

computing a vibration pattern based on the touched position and the sliding speed that are detected; and

vibrating the input detection plane with two actuators, based on the computed vibration pattern, wherein the computing ~~computes the vibration pattern further~~ includes determining an operation case, based on a ratio of the sliding speed of the operation body to a shift in an excitation timing between the two actuators, to compute the vibration pattern.

6. (Previously Presented) The information input method according to claim 5, wherein, when computing the vibration pattern, a vibration pattern of the input detection plane to generate vibrations from a low frequency and a small amplitude to a high frequency and a large amplitude is computed, as the operation body goes away from a position where the operation body has touched the input detection plane.

7. (Original) The information input method according to claim 5, wherein an amount of the input information is adjusted on the basis of the sliding speed.

8. (Previously Presented) The information input method according to claim 5, wherein the input information is selected on the basis of distance information on a distance from a point where the operation body touches the input detection plane to a point where a sliding of the operation body then stops.

9. (Currently Amended) An electronic device, comprising:  
a haptic function-provided input device that performs a touch operation to slide on an input detection plane; and

display means for displaying a display image based on information input by the input device, wherein

said input device includes

an input detection unit, which has the input detection plane, that detects a touching position of an operation body and a sliding speed of the operation body;

computation means for computing a vibration pattern based on the sliding speed detected by the input detection unit; and

a vibration unit that vibrates the input detection plane based on the vibration pattern computed by the computation means, wherein the computation means ~~computes~~ determines an operation case to compute the vibration pattern further based on a ratio of the sliding speed of the operation body to a shift in an excitation timing between two actuators of the vibration unit.

10. (Previously Presented) The electronic device according to claim 9, wherein the computation means computes a vibration pattern of the input detection plane to generate vibrations from a low frequency and a small amplitude to a high frequency and a large

amplitude, as the operation body goes away from a position where the operation body has touched the input detection plane.

11. (Previously Presented) The electronic device according to claim 9, further comprising:

control means for controlling the input information variably based on the sliding speed.

12. (Previously Presented) The electronic device according to claim 9, further comprising:

control means for controlling the input information variably based on distance information on a distance from a point where the operation body touches the input detection plane to a point where a sliding of the operation body then stops.

13. (Currently Amended) [[The]] A haptic function-provided input device that performs a touch operation to slide on an input detection plane according to claim 1, said device comprising:

an input detection unit, which has the input detection plane, that detects a touching position of an operation body and a sliding speed of the operation body;

a computation unit configured to compute a vibration pattern based on the sliding speed detected by the input detection unit; and

a vibration unit that vibrates the input detection plane based on the vibration pattern computed by the computation unit, wherein the computation unit is configured to compute the vibration pattern further based on a shift in an excitation timing between two actuators of the vibration unit, and the computation unit is configured to compute the vibration pattern

based on  $V_o * t' / V_x$ , where  $V_o$  is a standard sliding speed,  $t'$  is the shift in the excitation timing between the two actuators at  $V_o$ , and  $V_x$  is the sliding speed of the operation body.

14. (Previously Presented) The haptic function-provided input device according to claim 1, wherein, when the sliding speed of the operation body is less than a predetermined sliding speed, the vibration pattern includes a first number of waves, and, when the sliding speed of the operation body is greater than the predetermined sliding speed, the vibration pattern includes a second number of waves less than the first number of waves.